UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,872	12/21/2005	Nancy Hathaway	21309YP	6359
210 MERCK	7590 11/24/201	0	EXAM	IINER
PO BOX 2000			KAROL, JODY LYNN	
RAHWAY, NJ	0/065-090/		ART UNIT	PAPER NUMBER
			1627	
			MAIL DATE	DELIVERY MODE
			11/24/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
	10/539,872	HATHAWAY ET AL.	
Office Action Summary	Examiner	Art Unit	
	Jody L. Karol	1627	
The MAILING DATE of this communication appeariod for Reply	ppears on the cover sheet w	ith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory perio Failure to reply within the set or extended period for reply will, by statu. Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNI 1.136(a). In no event, however, may a d will apply and will expire SIX (6) MON ute, cause the application to become Af	CATION. reply be timely filed ITHS from the mailing date of this communication BANDONED (35 U.S.C. § 133).	
Status			
Responsive to communication(s) filed on 14 2a) This action is FINAL. 2b) Th 3) Since this application is in condition for allow closed in accordance with the practice under	nis action is non-final. vance except for formal matt		s is
Disposition of Claims			
4) ☐ Claim(s) 1 and 12-15 is/are pending in the ap 4a) Of the above claim(s) is/are withdr 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1 and 12-15 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.		
Application Papers			
9) The specification is objected to by the Examir 10) The drawing(s) filed on is/are: a) according a control of the drawing not request that any objection to the Replacement drawing sheet(s) including the correct of the control of the cont	ccepted or b) objected to e drawing(s) be held in abeyan ection is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.12	, ,
Priority under 35 U.S.C. § 119			
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents. 2. Certified copies of the priority documents. 3. Copies of the certified copies of the priority documents. * See the attached detailed Office action for a list. 	nts have been received. nts have been received in A iority documents have been au (PCT Rule 17.2(a)).	application No received in this National Stage	
Attachment(s)			
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 	Paper No(Summary (PTO-413) s)/Mail Date nformal Patent Application 	

Art Unit: 1627

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/14/2010 has been entered.

Receipt is acknowledged of applicant's Amendment/Remarks filed 6/14/2010.

Claims 1 and 12-15 have been amended. Claims 2-11 and 16-21 are cancelled.

Claims 1 and 12-15 are pending and are currently under consideration.

WITHDRAWN REJECTIONS

- 1. Applicant's cancellation of claims 7, 8, 11, 20, and 21 renders the rejection of claims 1, 7, 8, 11, 20, and 21 under 35 U.S.C. 103(a) as being unpatentable over Stephenson et al. (US 2004/0034083 A1) in view of Fahn et al. ("Unified Parkinson's Disease Rating Scale") moot. Thus, said rejection is herein withdrawn.
- 2. Upon further consideration, the rejection of claims 1 and 12-15 under 35 U.S.C. 103(a) as being unpatentable over Stephenson et al. (US 2004/0034083 A1) in view of Fahn et al. ("Unified Parkinson's Disease Rating Scale") is herein withdrawn in favor of the rejection presented *infra*.

Art Unit: 1627

3. Applicant's cancellation of claims 7, 8, 20, and 21 renders the rejection of claims 1, 7, 8, 20, and 21 under 35 U.S.C. 103(a) as being unpatentable over Teismann et al. ("Pharmacological Inhibition of COX-2 Provides Neuroprotection in the MPTP-Mouse Model of Parkinson's Disease") in view of Factor et al. ("Parkinson's disease: an open label trial of pergolide in patients failing bromocriptine therapy," *J. of Neurol. Neurosurg. Psychiatry*, 1988; 51: pgs 529-533) and in further view of Heinonen et al. ("Safety of Selegiline (Deprenyl) in the Treatment of Parkinson's Disease," *Drug Safety*, 1998 Jul; 19 (1): pgs 11-22) moot. Thus, said rejection is herein withdrawn.

4. Applicant's cancellation of claim 11 renders the rejection of claims 11 under 35 U.S.C. 103(a) as being unpatentable over Teismann et al. ("Pharmacological Inhibition of COX-2 Provides Neuroprotection in the MPTP-Mouse Model of Parkinson's Disease") in view of Factor et al. ("Parkinson's disease: an open label trial of pergolide in patients failing bromocriptine therapy," *J. of Neurol. Neurosurg. Psychiatry*, 1988; 51: pgs 529-533) and Heinonen et al. ("Safety of Selegiline (Deprenyl) in the Treatment of Parkinson's Disease," *Drug Safety*, 1998 Jul; 19 (1): pgs 11-22) in further view of Fahn et al. ("Unified Parkinson's Disease Rating Scale") moot. Thus, said rejection is herein withdrawn.

Art Unit: 1627

MAINTAINED REJECTIONS

5. The following rejections have been maintained from the previous Office Action dated 3/12/2010:

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teismann et al. ("Pharmacological Inhibition of COX-2 Provides Neuroprotection in the MPTP-Mouse Model of Parkinson's Disease" – cited on IDS) in view of Factor et al. ("Parkinson's disease: an open label trial of pergolide in patients failing bromocriptine therapy," *J. of Neurol. Neurosurg. Psychiatry*, 1988; 51: pgs 529-533) and in further view of Heinonen et al. ("Safety of Selegiline (Deprenyl) in the Treatment of Parkinson's Disease," *Drug Safety*, 1998 Jul; 19 (1): pgs 11-22).

Teismann et al. teach that neuroinflammation is believed to play a deleterious role in Parkinson's disease and in its experimental model produced by MPTP (see abstract). Teismann further teach inhibition of COX-2 by rofecoxib provides significant neuroprotection in MPTP-treated mice, and thus may be a valuable strategy for neuroprotective therapies in Parkinson's disease (see abstract).

Teismann et al. do not teach treatment of Parkinson's disease by administering pergolide and selegiline with the rofecoxib. Teismann et al. do not teach treating Parkinson's disease in a human.

Factor et al. teach treating Parkinson's disease in patients failing bromocriptine therapy by administering pergolide (see abstract). Factor et al. further teach that the efficacy of pergolide mesylate in Parkinson's disease has been well established (see page 529).

Heinonen et al. teach selegiline is widely used in the treatment of Parkinson's disease and that selegiline is generally widely tolerated in combination with other drugs (see abstract).

Page 6

It would have been obvious to one of ordinary skill in the art at the time of the invention to treat Parkinson's disease in a human by administering pergolide as taught by Factor et al., selegiline as taught by Heinonen et al., and rofecoxib as taught by Teismann et al. One of ordinary skill in the art would have been motivated to administer the combination of pergolide, selegiline and rofecoxib to treat Parkinson's disease because pergolide, selegiline and rofecoxib are taught individually in the art to be useful for treating Parkinson's disease. It is obvious to combine individual compositions taught to have the same utility to form a new composition for the very same purpose *In re Kerkhoven*, 626 F.2d 846, 205, U.S.P.Q. 1069 (C.C.P.A. 1980). Thus, the concomitant employment of selegiline, pergolide, and rofecoxib which are individually known to treat Parkinson's disease for the same purpose of treating Parkinson's treatment is reasonably expected to be effective.

While Teismann et al. does not explicitly teach administering rofecoxib to a human to treat Parkinson's disease, Teismann et al. teach an experimental model of Parkinson's disease using MPTP wherein rofecoxib is demonstrated to be effective. The next logical step would be to administer rofecoxib to humans with Parkinson's disease in order to treat said disease.

Thus, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time it was made.

Art Unit: 1627

New Rejections

8. Upon further consideration and in view of Applicants amendments to claims 1 and 12-15, the following rejections are newly added:

9. Claims 1 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stephenson et al. (US 2004/0034083 A1 – previously cited).

The instant claims are directed to methods of treating Parkinson's disease, relieving the symptoms of Parkinson's disease, and/or ameliorating/slowing the progress of Parkinson's disease comprising administration of a therapeutically effective amount of pergolide, the COX-2 inhibitor rofecoxib, and a secondary antiparkinson agent selegiline.

Stephenson et al. teach a method of treating or inhibiting Parkinson's disease in a subject in need thereof with one or more cyclooxygenase-2 selective (COX-2) inhibitors in combination with on or more second drugs in effective amounts to treat Parkinson's disease (see abstract; title; page 3, section [0024]). Stephenson et al. further teach COX-2 inhibitors include rofecoxib (see page 5, Table 1A, B-21; page 60, Table 2, B-21) and second drugs include the dopamine agonist pergolide and/or the enzyme inhibitor selegiline (see pages 31-32, section [0028]; page 66, section [0437]). Stephenson et al. teach the combination of rofecoxib with one or more second drugs, such as pergolide or selegiline for the treatment of Parkinson's disease (see pages 32-

34, section [0029], B-21; page 61, section [0209]). Stephenson et al. further teach the subject in need thereof is typically a human subject (see page 68, section [0432]).

Stephenson et al. do not teach an exemplification of a method treating Parkinson's disease with a combination of rofecoxib, pergolide, and selegiline.

Stephenson et al. also do not teach Hoehn & Yahr stage I-III Parkinson's disease is treated, as claimed in the instant claim 11.

However, It would have been obvious to one of ordinary skill in the art to administer rofecoxib, pergolide, and selegiline in the treatment of Parkinson's disease because rofecoxib in combination with selegiline or dopamine agonists such as pergolide is effective for the treatment or inhibition of Parkinson's disease as taught by Stephenson et al. One of ordinary skill in the art would have been motivated to administer rofecoxib, pergolide, and selegiline in patients with Parkinson's disease because a combination of anti-Parkinson's drugs is expected to have up to an additive effect. One of ordinary skill in the art would have had a reasonable expectation of success in administering rofecoxib, pergolide, and selegiline to treat Parkinson's disease because Stephenson et al. teach that rofecoxib can be combined with one or more drugs to treat Parkinson's disease, wherein said drugs include pergolide and selegiline. It is obvious to combine individual compositions taught to have the same utility to form a new composition for the very same purpose *In re Kerkhoven*, 626 F.2d 846, 205, U.S.P.Q. 1069 (C.C.P.A. 1980).

Thus, the invention as whole would have been *prima facie* obvious to one of ordinary skill in the art at the time it was made.

Art Unit: 1627

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 12-15 contain the trademark/trade name Vioxx®. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe rofecoxib and, accordingly, the identification/description is indefinite.

Response to Arguments

11. Applicant's arguments filed 6/14/2010 have been fully considered but they are not persuasive.

Applicant argues that Stephenson et al. do not teach or suggest the specific tripartite combination of a COX-2 inhibitor, a dopaminergic agent, and a monoamine oxidase agent, to treat or ameliorate the symptoms of Parkinson's disease, and instead provide a laundry list of COX-2 inhibitors that may be combined with a laundry list of

Art Unit: 1627

second drugs to treat Parkinson's disease. The Applicant states that one of skill in the art would not have had any expectation that applicant's tripartite combination of a COX-2 inhibitor, a dopaminergic agent, and a monoamine oxidase agent, would successfully treat Parkinson's disease based on Stephenson et al. In response it is respectfully submitted that Stephenson et al. teach a method of treating Parkinson's disease comprising administering rofecoxib in combination with one or more second agents, wherein the second agents include pergolide and selegiline (see abstract; page 34, Table 2, B-21). While Stephenson et al. do not exemplify rofecoxib with pergolide and selegiline, pergolide and selegiline are both taught as agents suitable for combination with rofecoxib. Thus, Stephenson et al. clearly suggests combining rofecoxib with additional agents including pergolide and selegiline.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

The Applicant's further argue that Teismann et al., Factor et al., and Heinonen et al. do not teach or suggest a tripartite combination of pergolide, selegiline, and rofecoxib to treat Parkinson's disease. In response it is respectfully submitted pergolide,

Art Unit: 1627

selegiline, and rofecoxib are taught individually by the cited prior art to treat Parkinson's disease. It is obvious to combine individual compositions taught to have the same utility to form a new composition for the very same purpose *In re Kerkhoven*, 626 F.2d 846, 205, U.S.P.Q. 1069 (C.C.P.A. 1980). Further, the motivation for the combination of cited references is based on the individual teachings by the prior art references citing agents useful in the treatment of Parkinson's disease and because it is expected that the combination of agents for the same purpose would have up to an additive effect. Moreover, the combination of the pergolide, selegiline, and rofecoxib taught by the prior art to be useful in the treatment of Parkinson's disease for the same purpose of treating Parkinson's disease is reasonably expected to be effective absent evidence to the contrary.

Thus, for these reasons, Applicant's arguments are found unpersuasive. Said rejection is maintained.

Conclusion

No claims are allowed.

Art Unit: 1627

Correspondence

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jody L. Karol whose telephone number is (571)270-3283. The examiner can normally be reached on 8:30 am - 5:00 pm Mon-Fri EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/Jody L. Karol/

Examiner, Art Unit 1627

/Yong S. Chong/ Primary Examiner, Art Unit 1627